ACU-RITE®

Instruction Manual

Rain Gauge

model 00875

CONTENTS

Unpacking Instructions 2
Package Contents 2
Product Registration 2
Features & Benefits: Display.....3
Features & Benefits: Collector ...4
Setup 5
Install or Replace Batteries.....5
Set Time, Date & Units.....6
Placement Guidelines 6
Rain Collector Installation.....7
Using the Rain Gauge 8
Troubleshooting 10
Calibration 11
Care & Maintenance..... 12
Specifications..... 12
FCC Information 12
Customer Support..... 13
Warranty..... 13

Questions? Contact Customer Support at (877) 221-1252 or visit www.**AcuRite**.com

SAVE THIS MANUAL FOR FUTURE REFERENCE.

ACURITE

Congratulations on your new AcuRite product. To ensure the best possible product performance, please read this manual in its entirety and retain it for future reference.

Unpacking Instructions

Remove the protective film that is applied to the LCD screen prior to using this product. Locate the tab and peel off to remove.

Package Contents

1. Display unit
2. Rain collector
3. Instruction Manual

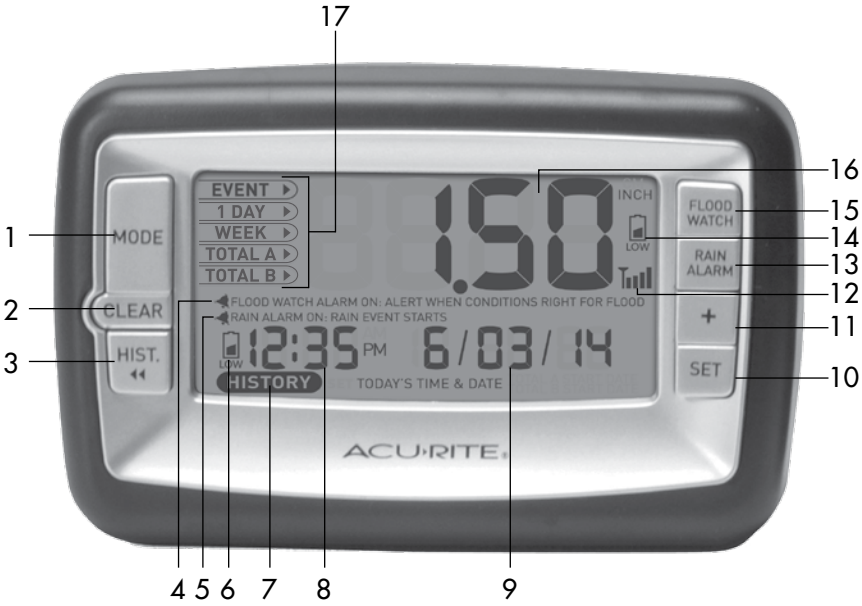
IMPORTANT PRODUCT MUST BE REGISTERED TO RECEIVE WARRANTY SERVICE

PRODUCT REGISTRATION

Register online
to receive 1 year
warranty protection

www.**AcuRite**.com

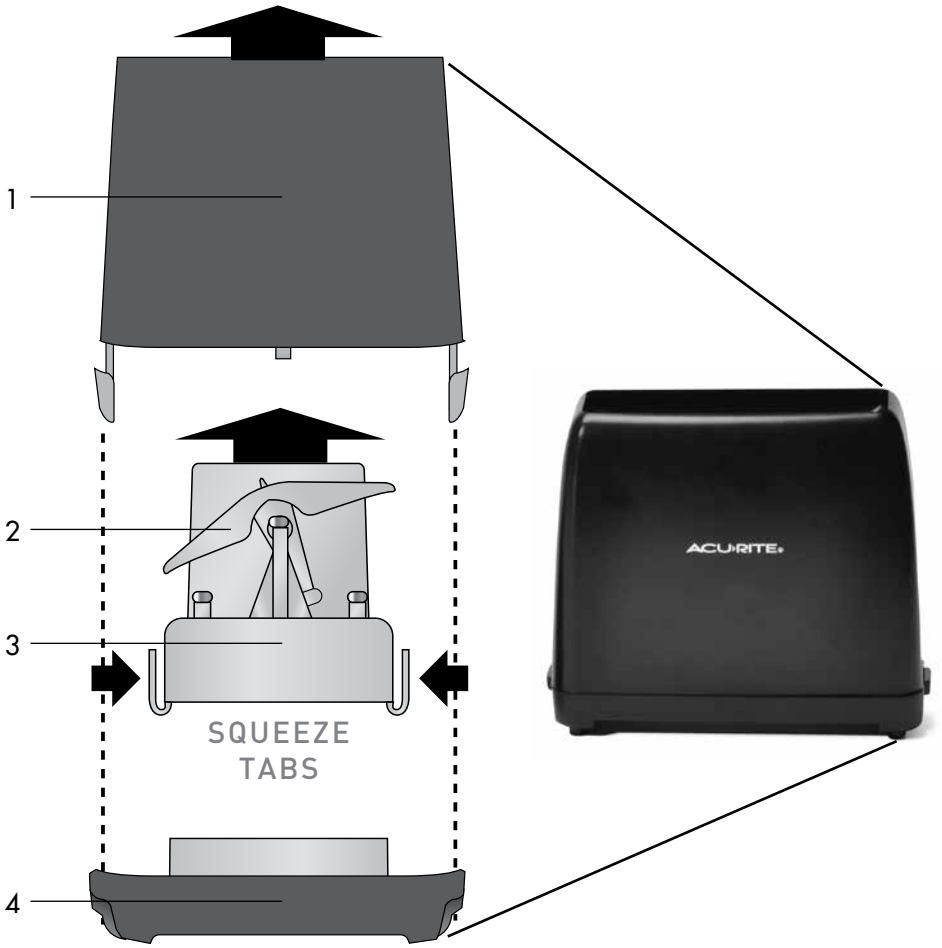
Features & Benefits



DISPLAY UNIT

1. **MODE Button**
   Toggle between rainfall readings for EVENT, 1 DAY, WEEK, TOTAL A or TOTAL B.
2. **CLEAR Button**
   Clears data being viewed for current mode (#1).
3. **HIST. Button**
   Displays historical data.
4. **FLOOD WATCH ALARM Indicator**
   Indicates conditions are present that could lead to flooding.
5. **RAIN ALARM Indicator**
   Indicates that a rain event has begun.
6. **Display Low Battery Indicator**
7. **HISTORY Icon**
   Indicates historical data is being viewed.
8. **Time**
9. **Date**
10. **SET Button**
    for setup preferences.
11. **"+" Button**
    For setup preferences.
12. **Rain Collector Signal Strength**
13. **RAIN ALARM Button**
    Activates/Deactivates rain alarm.
14. **Rain Collector Low Battery Indicator**
15. **FLOOD WATCH Button**
    Activates/Deactivates flood watch alarm.
16. **Rainfall Total**
    For current mode selected (#1).
17. **Mode**
    Indicates mode displayed.

Features & Benefits

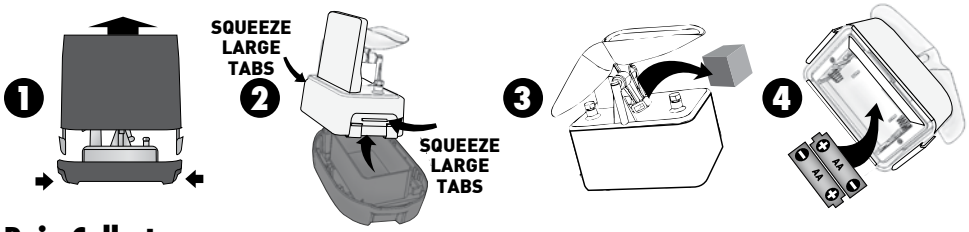


RAIN COLLECTOR

1. **Rain Collector Cover**
2. **Rain Collector Tipping Cups**
   Collects and empties rain for continuous rain measurement.
3. **Battery & Electronics Box**
4. **Rain Collector Base**

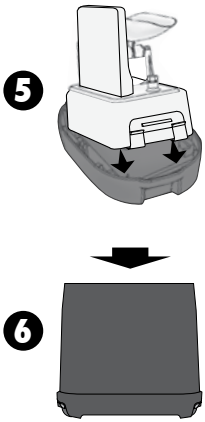
Install or Replace Batteries

AcuRite recommends high quality alkaline batteries for the best product performance. Heavy duty or rechargeable batteries are not recommended.



Rain Collector

1. Separate rain collector cover from the base by gently squeezing tabs and pulling the cover upwards.
2. Remove battery box by squeezing the two tabs on each end together.
3. Remove and discard foam rain gauge stabilizer.
4. Insert 2 x AA batteries into the battery compartment as shown. Follow the polarity (+/-) diagram in the battery compartment.
5. Securely place the battery box back into the rain collector base.
6. Securely re-attach the rain collector cover onto rain collector base.



Display Unit

1. Slide off the battery compartment cover.
2. Insert 2 x AA batteries into the battery compartment, as shown. Follow the polarity (+/-) diagram in the battery compartment.
3. Replace the battery cover.

PLEASE DISPOSE OF OLD OR DEFECTIVE BATTERIES IN AN ENVIRONMENTALLY SAFE WAY AND IN ACCORDANCE WITH YOUR LOCAL LAWS AND REGULATIONS.

BATTERY SAFETY: Clean the battery contacts and also those of the device prior to battery installation. Remove batteries from equipment which is not to be used for an extended period of time. Follow the polarity (+/-) diagram in the battery compartment. Promptly remove dead batteries from the device. Dispose of used batteries properly. Only batteries of the same or equivalent type as recommended are to be used. DO NOT incinerate used batteries. DO NOT dispose of batteries in fire, as batteries may explode or leak. DO NOT mix old and new batteries or types of batteries (alkaline/standard). DO NOT use rechargeable batteries. DO NOT recharge non-rechargeable batteries. DO NOT short-circuit the supply terminals.

Set the Time, Date & Units

This rain gauge is equipped with historical data and alarms that require accurate time and date settings to function properly. It is important to set the time, date and units before using the rain gauge.

Press and hold the "SET" button for 3 seconds to enter SET MODE. Once in set mode, the preference you are currently setting will blink on the display.

To adjust the currently selected (flashing) item, press and release the "+" button (press and HOLD to fast adjust).

To save your adjustments, press and release the "SET" button again to adjust the next preference. The preference set order is as follows:

CLOCK HOUR (note AM/PM indicators)
CLOCK MINUTE
CALENDAR MONTH
CALENDAR DATE
CALENDAR YEAR
UNITS (INCH or MM)

You will automatically exit SET MODE if no buttons are pressed for 20 seconds. Enter SET MODE at any time by pressing and holding the "SET" button for 3 seconds.

Placement for Maximum Accuracy

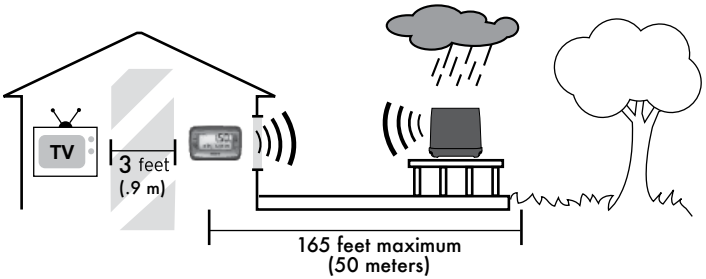
AcuRite sensors are sensitive to surrounding environmental conditions. Proper placement of both the display unit and rain collector are critical to the accuracy and performance of this product.

Display Unit Placement

Place the display unit in a dry area free of dirt and dust. Display unit stands upright for tabletop use or is wall-mountable.

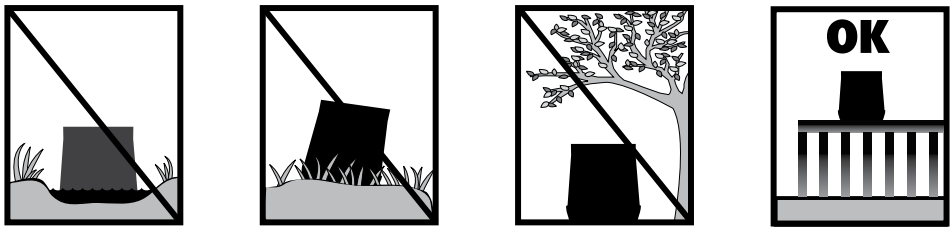
Important Placement Guidelines

- Display unit and rain collector must be within 165 ft (50 m) of each other.
- To maximize wireless range and communication, install the rain collector at least 3 ft (.9 m) above ground. Place both the display and the collector away from large metallic items, thick walls, metal surfaces, or other objects that may limit wireless communication.
- To prevent wireless interference, place both units at least 3 ft (.9 m) away from electronic devices (TV, computer, microwave, radio, etc.)

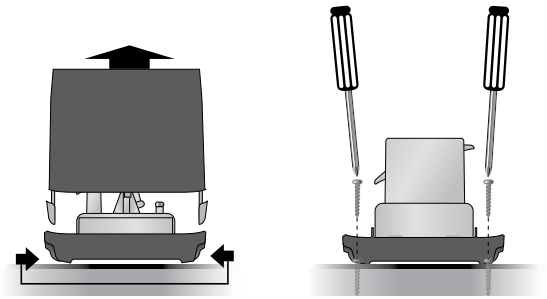


Rain Collector Installation

- To ensure accurate rain measurement, the rain collector MUST be placed on a flat, level surface.
- Ensure the rain collector is not placed in a low spot that could become flooded or in an area where there are obstructions above it.



1. Separate the rain collector cover from the rain collector base.
2. Locate the two holes on the rain collector base.
3. Fasten the rain collector base to a sturdy surface, like a deck railing or a fence post, with screws (included) using hand tools. (Power tools may slip during installation, causing damage to the rain collector.)



Setup is Complete

The rain collector will now synchronize with the display unit. It may take a few minutes for synchronization to complete. Please refer to the troubleshooting section of this manual if anything appears to be functioning improperly.

Using the Rain Gauge

Modes & Historical Data

Press the MODE button to view rainfall data for different modes. While a mode is being viewed, press the CLEAR button to erase the reading being viewed or press the HIST. button to view historical readings. You will automatically exit HIST. mode if no buttons are pressed for 30 seconds. Enter HIST. mode at any time by pressing the HIST button.

EVENT Mode

When EVENT mode is selected, rainfall data is shown for the most recent rainfall. An event ends when no rainfall has been detected for 8 hours. An event may be a brief drizzle, or a multi-day storm.

To display the last 7 rain event rainfall totals, press the HIST. button. Each time the HIST. button is pressed, one rain event is displayed with the event's time and date. To clear an event from memory, press AND HOLD the CLEAR button while the event is being viewed. Clearing data from EVENT mode does not impact other modes.

1 DAY Mode

When 1 DAY mode is selected, rainfall data is shown for today.

To display the DAILY RAIN for the last 7 days, press the HIST. button. Each time the HIST. button is pressed, the total rainfall recorded for the day will be shown with the time rainfall started (if applicable) and date. To clear any DAY rainfall total from memory, press AND HOLD the CLEAR button while the data for the day is being viewed. Clearing a day's rainfall data will subtract that rainfall amount from the WEEK, TOTAL A and TOTAL B modes.

WEEK Mode

When WEEK mode is selected, rainfall data is shown for the past calendar week (Sunday through Saturday).

To display the WEEKLY RAIN for the last 7 weeks, press the HIST. button. Each time the HIST. button is pressed, the total rainfall recorded for the week will be shown with the time rainfall started (if applicable) and date. To clear any WEEK rainfall total from memory, press AND HOLD the CLEAR button while the data for the week is being viewed. Clearing a week's rainfall data will subtract that rainfall amount from TOTAL A and TOTAL B modes.

TOTAL A/B Mode

TOTAL A and TOTAL B are total rainfall measured since the rain gauge was powered on or since the last time the mode was cleared. To display the start time and date for TOTAL A or TOTAL B, press the HIST. button. To clear TOTAL A or TOTAL B mode, press AND HOLD the CLEAR button while the mode is being viewed.

Alarms

Flood Watch Alarm

Press the FLOOD WATCH button to activate or deactivate the FLOOD WATCH ALARM. When the alarm is ON and flood and saturation conditions are present, an alarm will sound and the FLOOD WATCH indicator will highlight on the display. Flood conditions include:

> 3" (76.2 mm) in the last 7 days, and then >0.7" (17.78 mm) in the last 2 hours or >1" (25.4 mm) in the last 24 hours

> 2.3" (58.4 mm) in the last 4 days, and then >0.7" (17.78 mm) in the last 2 hours or >1" (25.4 mm) in the last 24 hours

> 1.5" (38.1 mm) in the last 2 days, and then >0.7" (17.78 mm) in the last 2 hours or >1" (25.4 mm) in the last 24 hours

> 1.4" (35.6 mm) in the last 2 hours

> 1.6" (40.6 mm) in the last 8 hours

> 1.8" (45.7 mm) in the last 24 hours

If flood or saturation conditions occur, the alarm sounds for 1 minute or until any button is pressed. If no buttons are pressed, the FLOOD WATCH indicator will flash on the display, and the alarm will sound three times on the hour for the next 8 hours.

NOTE: The rain gauge measures rainfall even while the flood alarm is off.

Rain Alarm

Press the RAIN ALARM button to activate or deactivate the RAIN ALARM. When the alarm is ON and any rainfall is detected an alarm will sound and the RAIN ALARM indicator will highlight on the display. The alarm sounds for 1 minute or until any button is pressed. If no buttons are pressed, the alarm will stop and the RAIN ALARM icon will flash for up to 30 minutes.

NOTE: The FLOOD WATCH ALARM and RAIN ALARM are NOT intended to be a safety device or warning system.

Troubleshooting

No rainfall: Display shows dashes	Dashes indicate that the display unit and rainfall collector are not synchronized. • Relocate the display unit and/or the rainfall collector. The units must be within 165 ft (50 m) of each other. • Make sure both units are placed at least 3 feet (.9 m) away from electronics that may interfere with the wireless communication (such as TVs, microwaves, computers, etc). • Use standard alkaline batteries. Do not use heavy duty or rechargeable batteries. NOTE: It may take up to 20 minutes for display unit and rainfall collector to synchronize after batteries are replaced. • Try resetting the units: 1. Bring both the display unit and rainfall collector indoors and position side by side. 2. Remove the batteries from both units. 3. Reinstall batteries in the rain collector first. 4. Reinstall batteries in the display unit last. 5. Let the units sit within a couple feet of each other for 20 minutes to gain a strong connection.
No rainfall: Display shows zeroes	Remove rain collector cover. Please make sure that you have removed the foam rain gauge stabilizer. Does the tipping lever flip back and forth easily? Try tipping it manually to see if it will register as rain. If not, try the reset steps listed above.
Rainfall registering when there's no rain	• Make sure the rain collector is mounted securely so that it cannot move or sway in the wind. The rain collector should be mounted on a solid and level surface in a clear area away from any overhead obstructions that may block rainfall. • Make sure you are using standard alkaline batteries (not heavy duty, max or rechargeable).
Can the rainfall collector remain outdoors in freezing temperatures?	No, the rainfall collector should be brought indoors when there is a possibility of freezing temperatures. Water expands when it freezes. If any water is left within the collector during a freeze, it can crack the plastic and cause permanent damage.
Display screen not working	• Check that the batteries are installed correctly. Batteries may need to be replaced.

If your AcuRite product does not operate properly after trying the troubleshooting steps, visit www.AcuRite.com or call (877) 221-1252 for assistance.

Calibration

Calibrate the Rain Gauge

The rain gauge can be calibrated to improve accuracy.

Items Needed: rain collector, display unit, plastic cup, pin, screw driver

1. First, place the rain collector on a level surface.
2. Place the display unit close by so you can monitor it during calibration.
3. Make a pin hole in the bottom of a plastic cup. Hold the cup over the rain gauge and fill it with exactly 1 cup (8 oz.) of water, allowing the water to slowly drip into the rain gauge. You should hear the internal cups tipping and see the water drain through the rain gauge.
4. A few seconds after each cup tip, the display unit will display rainfall in approximately 0.01" (0.2 mm) or more increments.
5. The cup of water should take more than 20 minutes to empty; a quicker period will result in an inaccurate calibration. Try to simulate a normal steady rainfall. When the cup is empty of water, the display unit should register 2.20" (55.9 mm).

Tips

- There should be nearly an equal number of water drops between cup tips. If not, then adjust the calibration screws beneath the tipping lever until an equal number of water drops are tipping the cups. Then, restart the calibration procedure.
- If you don't hear the cups tipping and see water dripping alternately out of each drain, there may be an issue with the rain gauge or it's adjustment.

Adjustment

If the rain gauge doesn't register close to 2.20" (55.9 mm) after the cup is empty, make an EQUAL adjustment to the two calibration screws, located beneath the tipping cups. Turn screws clockwise to increase rainfall; turn screw counter clockwise to decrease rainfall.

- To adjust the rainfall reading by 2% turn both screws 1/4 of a turn.
- To adjust the rainfall reading by 4% turn both screws 1/2 of a turn.
- To adjust the rainfall reading by 8% turn both screws 1 full turn.

Care & Maintenance

Display Unit Care

Clean with a soft, damp cloth. Do not use caustic cleaners or abrasives. Keep away from dust, dirt and moisture. Clean ventilation ports regularly with a gentle puff of air.

Rain Collector Care

Clean with a soft damp cloth. Do not use caustic cleaners or abrasives that could mar the polished surface of the rain collector or tipping cups. If the collector becomes dirty, rain water may not flow correctly through the rain collector. Some environmental conditions may require more frequent, periodic cleaning of the collector. After a cleaning, it is recommend to apply a small amount of liquid water repellent (found in the automotive section) to the tipping cups and collector funnel for optimal rain collection.

The rainfall collector cannot be used in the winter during freezing temperatures. Water expands when it freezes. If any water is left within the unit during a freeze, it can crack the plastic and permanently damage the unit.

Specifications

RAINFALL RANGE	0 to 99.99 in ; 0 to 99.99 mm
WIRELESS RANGE	165 ft / 50 m depending on home construction materials
WIRELESS FREQUENCY	433 MHz
POWER	Display: 2 x AA alkaline batteries
	Rain Collector: 2 x AA alkaline batteries
DATA REPORTING	60 second updates

FCC Information

This device complies with part 15 of FCC rules. Operation is subject to the following two conditions:
1- This device may NOT cause harmful interference, and
2- This device must accept any interference received, including interference that may cause undesired operation.
WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and the receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.
NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.

Customer Support

AcuRite customer support is committed to providing you with best-in-class service. **For assistance**, please have the model number of this product available and contact us in any of the following ways:

(877) 221-1252 info@chaney-inst.com

24/7 support at www.**AcuRite**.com

- Installation Videos
- Instruction Manuals
- Replacement Parts
- Register your Product
- Support User Forum
- Submit Feedback & Ideas

IMPORTANT PRODUCT MUST BE REGISTERED TO RECEIVE WARRANTY SERVICE

PRODUCT REGISTRATION

Register online to receive 1 year warranty protection

www.**AcuRite**.com

Limited One Year Warranty

At AcuRite, we proudly uphold our commitment to quality technology. Chaney Instrument Co. warrants that all products it manufactures to be of good material and workmanship, and to be free of defects when properly installed and operated for a period of one year from the date of purchase.

We recommend that you visit us at www.AcuRite.com for the fastest way to register your product. However, product registration does not eliminate the need to retain your original proof of purchase in order to obtain warranty benefits.

Chaney Instrument Co. warrants that all products it manufactures to be of good material and workmanship, and to be free of defects when properly installed and operated for a period of one year from the date of purchase. Remedy for breach of this warranty is limited to repair or replacement of the defective item(s). Any product which, under normal use and service, is proven to breach the warranty contained herein within ONE YEAR from date of sale will, upon examination by Chaney, and at its sole option, be repaired or replaced by Chaney. Transportation costs and charges for returned goods shall be paid for by the purchaser. Chaney hereby disclaims all responsibility for such transportation costs and charges. This warranty will not be breached, and Chaney will give no credit for products it manufactures which have received normal wear and tear, been damaged (including by acts of nature), tampered, abused, improperly installed, damaged in shipping, or repaired or altered by others than authorized representatives of Chaney.

The above-described warranty is expressly in lieu of all other warranties, express or implied, and all other warranties are hereby expressly disclaimed, including without limitation the implied warranty of merchantability and the implied warranty of fitness for a particular purpose. Chaney expressly disclaims all liability for special, consequential or incidental damages, whether arising in tort or by contract from any breach of this warranty. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Chaney further disclaims all liability from personal injury relating to its products to the extent permitted by law. By acceptance of any of Chaney's products, the purchaser assumes all liability for the consequences arising from their use or misuse. No person, firm or corporation is authorized to assume for Chaney any other liability in connection with the sale of its products. Furthermore, no person, firm or corporation is authorized to modify or waive the terms of this paragraph, and the preceding paragraph, unless done in writing and signed by a duly authorized agent of Chaney. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

For in-warranty claims: Chaney Instrument Co.
965 Wells St., Lake Geneva, WI 53147

ACU RITE®

Weather Stations

Temperature & Humidity

Weather Alert Radio

Kitchen Thermometers & Timers

Clocks

It's more than accurate, it's ACU RITE®

AcuRite offers an extensive assortment of precision instruments, designed to provide you with information you can depend on to Plan your day with confidence™.

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